

May 2018

Summary

State activity:

- **Four confirmed measles cases associated with international travel were investigated among two counties in May.**
 - Two cases were in Florida residents with confirmed international travel and no measles vaccination.
 - Two cases were in *non-Florida* residents with confirmed international contacts and unknown vaccination status.
 - Two cases were in children less than 5 years old and two cases were in adults.
 - Measles cases and potentially exposed persons are monitored closely to limit spread of disease.
- In Florida, the number of reported measles cases has remained at less than 10 cases per year since 2010.
- **No outbreaks of measles were reported in May.**
 - Contact investigations are important for every case of measles to determine the vaccination status for those potentially exposed to measles and to detect and prevent transmission.
 - Contact investigations were completed for all cases who traveled within the state while infectious.
 - **In May, a total of 944 contacts were identified who had possible exposure to a case of measles.**
 - In 2017, all measles cases (n=3) were exposed to the measles virus outside of Florida.
- **Vaccination is the best way to prevent measles infections.** In May, two cases were never vaccinated against measles and two cases had unknown vaccination status.
- Due to the generally high vaccination rates in Florida, cases of measles are rare but occur every year and are most often associated with international travel.
 - Cases reported in May acquired infection from Afghanistan, France, Ukraine, and Venezuela.
- To learn more about measles, please visit <http://www.floridahealth.gov/measles>.

National activity:

- Even though measles has been eliminated in the United States, cases occur every year, mostly among unvaccinated individuals. As of April 21, the CDC has reported 63 confirmed cases of measles so far in 2018. In 2017, the CDC reported a total of 118 cases.
- In 2017, Minnesota experienced a large outbreak of measles in a community with low measles vaccination coverage that affected a total of 65 individuals. For detailed information on this outbreak see [page 13](#).
- The two dose measles vaccination schedule has been successful at decreasing cases, and measles was eliminated from the United States in 2000.

International activity:

- Recently, increased measles activity has been reported all over the world. In May 2018, multiple measles outbreaks were reported in the Americas, Asia, Africa, Europe, and the Pacific.
- The CDC has issued a Level 1 Travel Alert for several countries with measles outbreaks, including Greece, England, Serbia, Indonesia, Democratic Republic of the Congo, Italy, Ukraine, the Philippines, Romania, and France. Travelers to these countries should make sure they are vaccinated against measles with the MMR (measles, mumps, and rubella) vaccine. For more information, please visit <https://wwwnc.cdc.gov/travel/notices>.

Surveillance goals:

- Measles surveillance is conducted to prevent transmission and severe disease, and initiate control measures.
- Surveillance is also conducted to monitor effectiveness of immunization programs and vaccines. For more information on the data sources used in Florida for measles surveillance, see [page 13](#) ►

Measles Cases by Year Reported

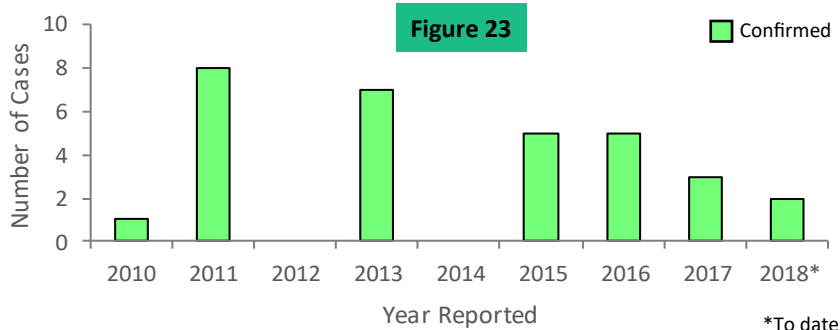


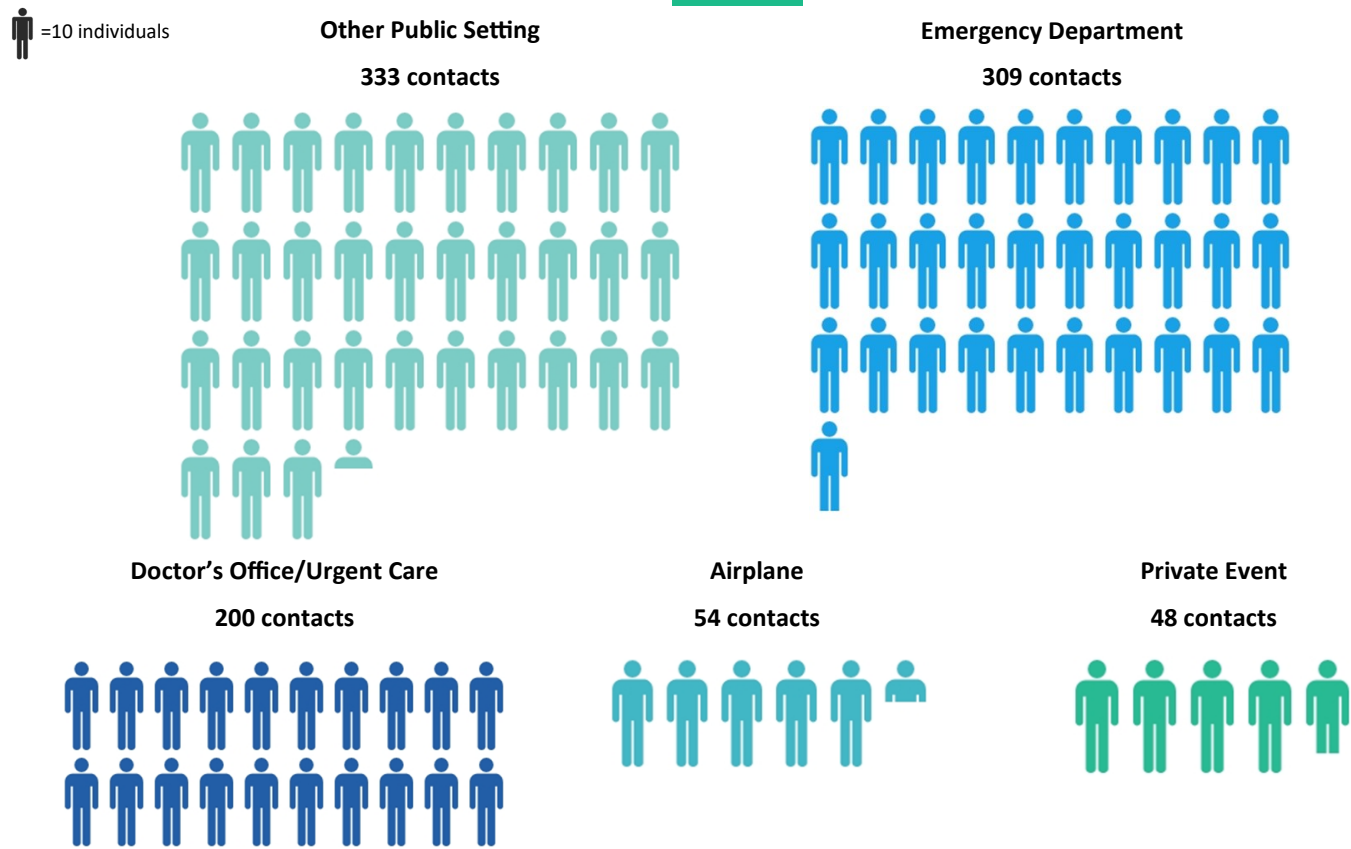
Figure 23 shows the number of confirmed and probable cases of mumps reported into Merlin, 2013 through May 2018.

Thus far in 2018, two confirmed measles cases have been reported in Florida residents. Neither of the cases were linked to each other. The swift identification and response to cases helped prevent disease transmission in Florida.

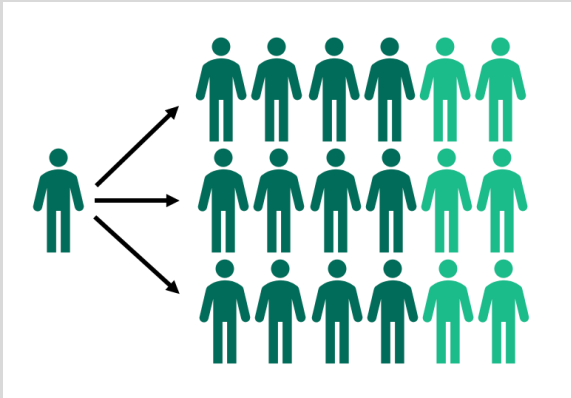
Measles Contact Investigation

Measles is a highly contagious disease among persons who are susceptible. It is important to identify all contacts of cases to determine if they are protected against measles through either vaccination or history of disease and to quickly determine if they develop symptoms of measles, indicating a possible infection. In addition to contacts of measles cases among Florida residents, contacts of cases from other states who visited Florida while infectious must also be investigated. **In May, Florida investigated a total of 944 contacts of four measles cases, including two cases in Florida residents and two cases in non-Florida residents.** Figure 24 shows the number of contacts by setting.

Figure 24



Due to strong public health efforts, 944 contacts were identified. **Among those reached, the majority were vaccinated against measles.** Measles is a highly infectious virus, and the lack of secondary measles cases signifies the importance of herd immunity. In a population with no immunity to measles, one case of measles could potentially lead to 12 to 18 more cases. High measles vaccination rates are especially important to prevent infection in those too young to be vaccinated.



Case Data

- Current case information is preliminary and will change as new data are gathered. The most recent data available are displayed in this report.
- Pertussis, varicella, and mumps are reportable diseases in Florida. Case information is documented by county health department (CHD) epidemiologists in Merlin, Florida's reportable disease surveillance system.
- CHD epidemiologists also report outbreaks of pertussis, varicella, and mumps into Merlin.
 - Household-associated cases are defined as two or more cases exposed within the same household.
 - Pertussis and mumps outbreaks are defined as two or more cases associated with a specific setting outside of a household.
 - Varicella outbreaks are defined as five or more cases associated with a specific setting outside of a household.
- For more information about reportable diseases, please visit www.Floridahealth.gov/diseasereporting.
- For more information about Florida's guides to surveillance and investigation, including disease specific probable and confirmed case definitions, please visit www.Floridahealth.gov/gsi.
- For the full article on a Minnesota outbreak of measles, please visit <https://www.cdc.gov/mmwr/volumes/66/wr/mm6627a1.htm>

Population Data

- Population data used to calculate incidence rates are from FLHealthCHARTS (Community Health Assessment Resource Tool Set).
- For more information about FLHealthCHARTS, please visit www.flhealthcharts.com.

Vaccination Data

- Vaccination data from cases are from Merlin, as identified by CHD epidemiologists.
- Vaccination status is determined using the Advisory Committee on Immunization Practices Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger, 2018.
- Cases are considered up-to-date if they have received the recommended number of doses of vaccine for a particular disease for their age at the time of their illness onset. Cases are considered under vaccinated if they have received at least one but not all doses of vaccine recommended for a particular disease for their age at the time of their illness onset.
- For more information about immunization schedules, please visit <https://www.cdc.gov/vaccines/schedules/index.html>.
- For a full text version of a new study on pertussis vaccination, please visit <http://www.cidid.org/publications-1/2018/3/29/the-impact-of-past-vaccination-coverage-and-immunity-on-pertussis-resurgence>